

Two New Synonymies and a New Name in North American *Lachesilla*

(Psocoptera: Lachesillidae)

EDWARD L. MOCKFORD

Illinois State University, Normal, Illinois

AND

ALFONSO NERI GARCIA ALDRETE

*Universidad Nacional Autonoma de Mexico,
Mexico City*

The new synonymies reported herein result in removal of one name from the list of North American *Caecilius*. Correct association of sexes of *Lachesilla pacifica* Chapman produces a synonymy of *L. silvicola* Chapman with *L. pacifica* and necessitates one new name.

Caecilius nigrotuberculatus Curran (Curran, 1925:292).—The senior author examined the type of *C. nigrotuberculatus* (type No. 1543 in Canadian National Collection, Ottawa, Canada) and found it to be *Lachesilla pedicularia* (Linnaeus). Therefore, by priority, the name *C. nigrotuberculatus* falls into the extensive synonymy of *L. pedicularia*. For complete synonymy of *L. pedicularia* to date see Smithers, 1967:62.

Lachesilla silvicola Chapman.—This is a synonym of *L. pacifica* Chapman. The latter species was described by Chapman (1930) in page 353 and is based on female material only. *L. silvicola* is described in the same paper on page 361. The holotype is a male. We find that the male of *L. silvicola* is the male of *L. pacifica* and therefore, by page priority, *L. silvicola* falls into the synonymy of *L. pacifica*. Our evidence for associating the sexes as indicated above is as follows:

(1) Association of sexes in field collections.—Of 66 lots of *L. pacifica* and *L. silvicola* that have come to our attention, the male and female associated by Chapman under the name *L. silvicola* have been found together in only one lot—the type material of *L. silvicola*. In this lot there were also females of *L. pacifica*. In 14 lots (including the one just referred to) there were males of *L. 'silvicola'* with females of *L. pacifica*. In 22 lots of *L. silvicola* ♀ that have come to our attention there were males associated with only one lot (the type material) and females alone in the other 21.

(2) Comparative morphology.—Garcia Aldrete (1974) has studied the systematics above the species level in *Lachesilla* and has established a series of species groups for this genus. In his classification,

L. pacifica is placed in the *pedicularia* group on basis of both male and female characters. The female assigned by Chapman to *L. silvicola* (called *L. sp. R-2* by Garcia Aldrete) goes to the *rufa* group, which is rather far from the *pedicularia* group in characters of both sexes.

The female of *L. silvicola* Chapman is now un-named, and we propose the name ***L. yakima*** new species for this species. Chapman's allotype is here designated holotype (type locality SEATTLE, KING COUNTY, WASHINGTON; type material in P. J. Chapman collection, Geneva, New York). Records include the female records of *L. silvicola* cited by Chapman, female records of *L. silvicola* cited by Sommerman (1946) plus the following (collector is E. L. Mockford except where indicated otherwise):

Canada: British Columbia: Vancouver, 16 August 1963, beating Douglas fir (*Pseudotsuga taxifolia* Britton) 1 ♀, R. C. Rounds.

United States: California: El Dorado County: 1 mile south of Camp Richardson, State Highway 88, 28 August 1953, 5 ♀; Humboldt County: 9 miles east of Blue Lake, Highway 299, 30 July 1969, altitude 900 feet, beating hemlock (*Tsuga heterophylla* Sargent) and western red cedar (*Thuja plicata* Donn), 1 ♀, 2 nymphs; King County: 8 miles east of Issagoah on Highway 10, altitude 825 feet, 4 August 1969, beating western red cedar, vine maple (*Acer circinatum* Pursch) and blackberry (*Rubus* sp.), 1 ♀; Mariposa County: Yosemite National Park, Glacier Point Road, altitude 7174 feet, 6 September 1953, beating pines (*Pinus* spp.) and red fir (*Abies magnifica* Murray) 1 ♀; Monterey County: Redwood Gulch, 7 August 1962, 4 ♀, E. Schlinger; Tulare County: Generals Highway to Sequoia National Park, altitude 7500 feet, 15 miles north of park boundary, 7 September 1953, beating red fir, 2 ♀. Utah: Utah County: Alpine Loop Road off State Highway 189 near Heber City, altitude 5800 feet, 24 August 1953, beating firs (*Abies* spp.), especially dead branches, 1 ♀. Washington: Clallam County: Lake Sutherland, 10 August 1927, 1 ♀, 1 nymph, C. R. Crosby; Jefferson County: Hoh River Road, 4 miles east of Highway 101, 14 August 1966, beating Sitka spruce (*Picea sitchensis* Carrière) 1 ♀, sifting litter of maple leaves, 1 ♀. Wyoming: Teton County: 17 miles southwest of Jackson, Highway 26, 5 August 1966, beating spruces (*Picea* sp.), Snake River Valley, 1 ♀, 3 nymphs; Highway 89, 5 miles south of Yellowstone National Park, altitude 6900 feet, 18 August 1969, beating Douglas fir, 1 ♀.

Note.—Since 54 adult females of this species have been collected to date and the male remains unknown, we suspect that the species is parthenogenetic.

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BOOK NOTICE

INSECTS IN FLIGHT. Werner Nachtigall. Translated by Harold Oldroyd, Roger Abbott and Marguerite Biederman-Thorson. McGraw-Hill, New York. 153 pp. 1974. \$12.95.

The informal style and extensive use of photographs and line drawings give this account of the morphology and physiology of insect flight mechanisms the flavor of a Life Nature Guide Volume. The author has entwined strands of personal and scientific philosophy with factual material, and emphasizes analogies between organisms and machines to clarify explanations of physiological processes. The 44 chapters cover subjects ranging from the fine structure of insect flight musculature to orientation in foraging honey bees and discussions of the instrumentation required for studies of aerodynamics.—EDITOR.